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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,501	05/25/2006	Nicola Mary Aston	PB60196	8326

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SMITHKLINE BEECHAM CORPORATION
CORPORATE INTELLECTUAL PROPERTY-US, UW2220
P. O. BOX 1539
KING OF PRUSSIA, PA 19406-0939

EXAMINER	
KUMAR, SHAILENDRA	
ART UNIT	PAPER NUMBER
1621	

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/551,501	ASTON, NICOLA MARY	
	Examiner	Art Unit	
	SHAILENDRA -. KUMAR	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/30/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-9 are pending in this application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 9/30/05 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the instant claim 1, m is defined as selected from 0, 1, 2, 3, and 4, and in the proviso, it claims that if R1 is unsubstituted cycloalkyl, m is not selected from 0, 1, 2, 3, and 4. At the same time, the claim fails to mention as to what will be the value of m when R1 is unsubstituted cycloalkyl, thus rendering the claims indefinite.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement because the specification and application while being enabled for treating a disease state mediated by p38 kinase activity or mediated by cytokines, such as psoriasis and rheumatoid arthritis, (see DHAR et al., A Survey of Cyclic Replacements for the Central Diamide Moiety of Inhibitors of Inosine Monophosphate Dehydrogenase, Bio. & Med. Chem. Lett., Vol 12 (2002), pages 3125-3128, especially page 3125) does not enable one skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims, for the reasons describe below.

As stated in MPEP 2164.01 (a), "there are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue."

The factors to be considered when determining whether a disclosure meets the enablement requirement of 35 USC 112, first paragraph, were described in In re Wands, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) as:

1. the nature of the invention;
2. the breadth of the claims;
3. the state of the prior art;
4. the relative skill of those in the art;
5. the predictability or unpredictability of the art;
6. the amount of direction or guidance presented [by the inventor];

7. the presence or absence of working examples; and

8. the quantity of experimentation necessary [to make and/or use the invention].

The eight Wands factors are applied to Claims 9 of the present invention below:

(1) The Nature of the Invention

Claim 9 is directed to:

A method for treating a condition or disease state mediated by p38 kinase activity or mediated by cytokines produced by the activity of p38 kinase comprising administering to a patient in need thereof a compound according to claim 1 or a pharmaceutically acceptable salt or solvate thereof.

(2) The Breadth of the claims

Claim 9 is directed to the treatment of all conditions or diseases mediated by p38 kinase activity or mediated by cytokines by administering to a patient in need thereof a compound of

Claim 1.

Claim 9 will be give its broadest reasonable interpretation. The applicable rule for interpreting the claims is that "each claim must be separately analyzed and given its broadest reasonable interpretation in light of and consistent with the written description." See MPEP 2163(II)(1), citing In re Morris, 127 F.3d 1048, 1053-1054; 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). In view of this rule, Claim 12 which does not specify the many possible diseases mediated by p38 kinase activity or mediated by cytokines will be interpreted to encompass all types of diseases that are possibly associated with p38 kinase or cytokine activity.

(3) The state of the prior art

It was known in the art at the time of this application that small molecule mediators of the type found in Claim 1 can treat psoriasis and rheumatoid arthritis (see DHAR et al. page 3125).

The state of the art at the time of this application was that no single compound, including the compound of Claim 1, was known to treat all conditions or diseases mediated by p38 kinase activity or mediated by cytokines.

(4) The relative skill of those in the art

The level of skill in the art (pharmaceutical chemists, physicians would be high.

(5) The predictability or unpredictability of the art

It is noted that the pharmaceutical art generally is unpredictable, requiring each embodiment to be individually assessed for physiological activity. In cases involving unpredictable factors, such as most chemical reactions and physiological activity, the scope of enablement varies inversely with the degree of unpredictability in the factors involved. In re Fisher, 427 F.2d 833,839. Therefore, the more unpredictable an area, the more specific enablement is needed in order to satisfy the statute. Added to the unpredictability of the art itself is the question whether a compound known to treat psoriasis and rheumatoid arthritis could reliably and predictably be extrapolated to all other disease mediated by p38 kinase and cytokine activity. This would require in vitro activity data, in vivo activity data, patient population data, etc., in patients with all the diseases claimed. There is no absolute predictability, even in view of the high level of skill in the art.

(6) The amount of direction or guidance presented (by the inventor)

The specification in the present invention discloses that diseases mediated by p38 kinase and cytokine activity play an important role in treating psoriasis and rheumatoid arthritis only. See DHAR et al. There is insufficient guidance in the specification for the role that the compound of Claim 1 would play in other diseases mediated by p38 and cytokines.

(7) The presence or absence of working examples

As noted in the previous section, the specification discloses the general role of p38 kinase and cytokines. However, the specification has no working examples, such as in vivo, in vitro, or patient population studies of the role p38 and cytokines play in specific diseases, except for psoriasis and rheumatoid arthritis.

(8) The quantity of experimentation necessary (to make and or use the invention).

Given the absence of direction or guidance (or working examples) in the specification for the role the compound of formula (I) plays in mediating p38 kinase or cytokine activity, it would cause a skilled artisan an undue amount of experimentation to practice this invention to determine which patients with which diseases would benefit from which of the many claimed compounds within the scope of the invention with a reasonable expectation of success.

As stated earlier, the guidance provided in the application about the role of the compound (of Claim 1 in the treatment of psoriasis and rheumatoid arthritis, along with

the prior art is sufficient to enable one skilled in the art to practice this invention without an undue amount of experimentation.

Applicant can overcome this rejection by inserting from the specification the enabled diseases, in particular psoriasis and rheumatoid arthritis.

Double Patenting

6. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13, 16-20 of copending Application No. 10/492, 698. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of instant application is structurally similar to those in the above patent application, with all the substituents being similar to those claimed herein, and method of making the compounds is also similar and thus one of ordinary skill in the art would be motivated to obtain compounds within the generic disclosure of the above patent application, with the reasonable expectation of achieving successful method of treating p38 kinase activity related diseases, absent evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAILENDRA -. KUMAR whose telephone number is (571)272-0640. The examiner can normally be reached on Mon-Thur 8:00-5:30, Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571)272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SHAILENDRA KUMAR
Primary Examiner
Art Unit 1621

S.Kumar
8/31/06